



**Los Angeles County
Certified Unified Program Agency
Health Hazardous Materials Division**



SEPARATION OF INCOMPATIBLE CHEMICALS

FACT SHEET 02-03-HW

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Hazardous waste regulation requires that hazardous waste must be separated from incompatible materials. Additionally, the fire code requires that incompatible materials must be stored separately.

WHAT DOES “INCOMPATIBLE” MEAN?

Chemical reactions occur when certain chemicals are mixed together. In uncontrolled circumstances (i.e., spills), chemicals that are not compatible with each other may react with one another and produce any of the following hazards:

- Heat or pressure
- Fire or explosion
- Violent reaction
- Toxic dusts, mists, fumes or gases, or
- Flammable fumes or gases

Chemicals which, when mixed with each other, can react to produce these hazards are termed “incompatible”. They must be stored separately in order to prevent uncontrolled chemical reactivity hazards. For hazardous materials storage, this requirement only applies if containers have a capacity of greater than five pounds or one-half gallon.

HOW TO SEPARATE INCOMPATIBLES

- Distance – separate by a distance of not less than 20 feet
- Partition – isolate using partitions, berms or spill pallets
- Cabinets

HOW TO DETERMINE CHEMICAL COMPATIBILITY

Chemicals can usually be grouped into generic hazard groups, with the more common groups being flammable/combustible, acid, alkaline, oxidizer and reactive. These groups are incompatible with each other and must be stored separately.

The best way to determine incompatibility is to consult the Material Safety Data Sheet (MSDS). Section I of the MSDS will identify the chemical family and Section IV (Reactivity Data) will identify incompatible materials. Hazardous wastes may be harder to categorize, as they may have undergone chemical changes in the process of becoming a waste. If the waste has not retained the same chemical properties as the material, consult the waste profile (for disposal) or a professional to help you determine in what hazard group the waste belongs.

NOTE: This fact sheet is a summary of the laws and regulations pertaining to this subject. It is intended for informational purposes only and may not encompass all the laws and regulations to this topic. More details may be found at Cal/EPA Department of Toxic Substance Control (DTSC) www.dtsc.ca.gov. If further information is needed, call the County of Los Angeles CUPA at (323) 890-4045, or your local district office.

References

- 22 California Code of Regulations 66262.34(a)(1)
- Title 32, Los Angeles County Code 8001.9.8